

[0050] The computing device 100 can include various sensors to detect input, such as capacitive touch or near touch, at the input region 108. The various sensors can be or can include a capacitive array that produces an electrical response in response to a touch input or a near touch input at the input region 108. Additionally or alternatively, piezo-electric or other strain-sensitive elements can produce an electrical response in response to a force input or a deformation of the variable input region 108. In some examples, other sensors are contemplated. The computing device 100 can use the electrical response of the sensor(s) to control a function of the computing device 100 and to provide haptic feedback (e.g., a tactile vibration) to the input region 108.

[0051] In some examples, the input region 108 can receive a touch and/or force input to generate a user input signal. To illustrate, the computing device 100 can define an array of sub-input regions 106 that can be or can include physical key mechanisms and/or virtual keys at the input region 108. Each sub-input region 106 can be associated with a particular function executable by the computing device 100. Various indicia (e.g., alpha-numeric symbols or the like) can be displayed at the input region 108 or within the sub-input regions 106 that are indicative of the predetermined functions at a corresponding sub-input region 106. In some examples, however, indicia can be printed or otherwise illustrated at the input region 108 or within the sub-input regions 106. One or more sensors of the user computing device 100 (e.g., a capacitive array, a strain-sensitive element) can be configured to produce an electrical response upon the detection of a touch and/or force input at the variable input region 108. Accordingly, the user computing device 100 can generate a user input signal based on the predetermined function associated with the one or more sensors.

[0052] In some examples, one or more haptic elements can provide localized haptic feedback to the input region 108, for example, at or near the location of the received touch and/or force input. Additionally or alternatively, haptic feedback can be provided to the input region 108 to indicate to a user a boundary of sub-input regions 106 (e.g., causing a tactile vibration when a user's finger traverses a perimeter of a virtual key). This can simulate a keyboard surface having discrete keys (e.g., as a keyboard having mechanically actuated key caps), but over a substantially flat dimensionally variable input region 108. In some examples, however, the input region 108 can additionally or alternatively include an input component, such as a keyboard, including discrete keys, such as mechanically actuated keys. The components involved in producing a haptic response can include an input surface and one or more actuators (such as piezoelectric transducers, electromechanical devices, and/or other vibration inducing devices). In some examples, the input region 108 can be defined by any variety of input device including, but in no way limited to capacitive touch inputs, mechanical inputs, or optically sensed inputs.

[0053] FIG. 1C shows a side view of the computing device 100 shown in FIG. 1B. As can be seen, in some examples, the computing device can include an enclosure 110 that can include one or more computing components and an input region 108 that can be present at, or that can at least partially define, an exterior surface of the computing device 100. In some examples, the one or more components defining the input region 108 can protrude from the enclosure 110. For example, where the input region 108 is defined by physical

input components, such as keys, the keys can protrude a given distance from the enclosure 110. In some examples where the input region 108 is defined by a touch screen, the touch screen component itself can protrude from the enclosure 110. In some examples, however, the input region 108 can be substantially flush or level with all or a portion of an exterior surface defined by the enclosure 110.

[0054] FIG. 1D shows an exploded view of the device 100 illustrated in FIG. 1B. In some examples, portions of the enclosure 110 can be disassembled or separated from one another, for example, a first portion, such as base 114 of the enclosure 110 can be separable from at least a second portion, such as a top portion 112. The base 114 and the top portion 112 can be interconnected or otherwise formed from a single piece of material (e.g., metal, plastic, or ceramic).

[0055] In some examples, the top portion 112 of the enclosure 110 can define feature or region 113 that can at least partially hold, support, define, or surround the input region 108, for example, as defined by an input component. In some examples where the input region 108 is defined by keys of a keyboard, the feature 113 can include any number of apertures defined by the top portion 112. In some examples, where the input region 108 includes a display, the feature 113 can include a single aperture defined by the top portion 112. In some examples, the enclosure can at least partially define an internal volume 115 of the device 100. For example, the base 114 can at least partially define the internal volume 115 that can further be defined by other portions 112 of the enclosure 110 and/or an input component 108.

[0056] In some examples, one or more computing components can be positioned at any desired location in the internal volume 115 defined by the enclosure 110. As shown in FIG. 1D, a processing unit 132 and the memory 136 are positioned within an internal volume or an inner cavity 115 defined by the enclosure 110. The processing unit 132 can be operatively connected to the memory 136. In some examples, the device 100 can include additional computing or other components in the internal volume 115, and can be operatively coupled to the processing unit 132 and/or memory 136. For example, the device 100 can include an input/output component 130 positioned in the internal volume 115. The device 100 can also include an operational component 134 positioned in the internal volume 115. In some examples, the operational component 134 can include any desired variety or combination of electronic components and can provide additional functionalities to the device 100. In some examples, the operational component 134 can be selected based at least partially on a desired functionality of the device 100. For example, where a user might desire the device 100 to have wireless internet connectivity, the component 134 can include a cellular antenna. In some examples, however, the operational component 134 can additionally or alternatively include other desired components, such as additional memory. Further details of the computing device 200 are provided below with reference to FIGS. 2A-2E and FIG. 3.

[0057] FIGS. 2A-2E show various views of a computing device 200. The computing device 200 can be substantially similar to, and can include some or all of the features of any of the computing devices described herein, such as computing device 100. As shown, the computing device 200 can include an enclosure 206 and an input component, for example, one or more keys 208 positioned at an exterior